VoIP

Multiport ISDN VoIP IAD with ADSL2+ Interface

SmartNode 4650

The SmartNode 4650, with up to 5 BRI ports and 8 simultaneous voice channels, is the best way to connect ISDN networks to the world of voice over IP. Using integrated ADSL2+ broadband access, it delivers converged voice and data services that exceed ISDN standards.

3/5 Ports BRI ISDN VoIP

3 or 5 ISDN BRI So ports, 4 or 8 low bandwidth voice or T.38 fax calls. Advanced adaptive traffic management and shaping for maximum voice quality. Voice prioritization and DownStreamQoS™.

G.SHDSL.bis Broadband Access

Complete access router with integrated ADSL2+ WAN interface. Up to 24 Mbps downstream throughput, supporting ATM QoS. Multiple PVC, VLAN, and DSLAM interoperability.

Full Telephony Features

SessionRouter™ allows flexible call routing and numbering plan adaptations, CLIP/CLIR, hold, AOC transfer, and much more.

Management & Provisioning

Web-based management, SNMP, command line interface, and auto-provisioning for automated configuration and software upgrades.

Full VoIP Protocol Support

SIPv2, H.323v4, MGCP/IUA, ISDN, DSS1, QSIG, T.38, fax and modem bypass, DTMF relay.*

Outstanding Interoperability

Interoperable for voice and T.38 fax with leading SIP service providers, softswitch vendors, and Asterisk™ IP-PBX.

The SmartNode 4650 series is the CPE of choice for business broadband access providers that want to generate new revenue and acquire new customers through voice-over-IP. Part of the proven market-leading SmartNode VoIP product family, the SmartNode 4650 Series features a 3 or 5 BRI/So port configuration to fit the requirements of small and medium enterprises.

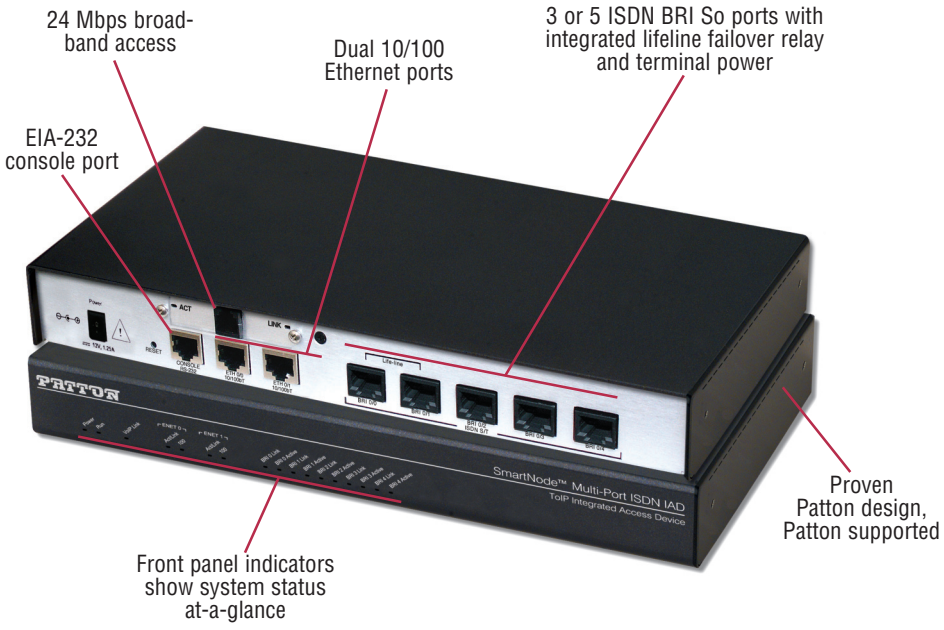
In one single box, it combines broadband access and voice-over-IP, and thanks to IGMP v2/v3 proxy functionality it also delivers video. Throughput ranges up to 24 Mbps downstream are made possible with ADSL2+ Annex A & B support, and interoperability covers all major ADSL2+ COs. This is triple-play at your fingertips!

The extra BRI port solves many VoIP network integration problems encountered in real-world installations. The port can synchronize the gateway, and it can be used as a local PSTN breakout port for survivability. It can also be used to shorten the time of number portability—accepting incoming calls through the breakout port while making outgoing calls on the cost-saving VoIP network. With the lifeline relay, the port even enables integration of an ISDN emergency terminal powered from the public ISDN.

Special Rates Available
Call for Details

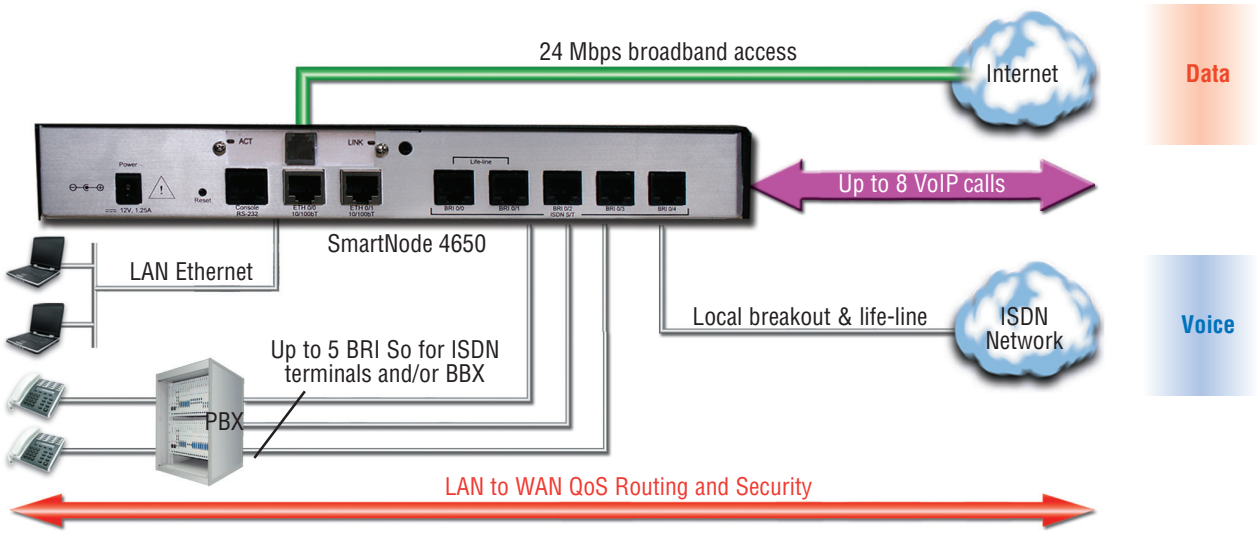
Like every SmartNode, the 4650 Series models are state-of-the-art VoIP gateways with outstanding interoperability for fax (T.38 and G.711 fallback) and voice. SmartNode products provide seamless network integration, continuous trouble-free operation and cost effective deployment to protect your investments for the future.

Visit www.patton.com for more information.


24 Mbps broadband access
Dual 10/100 Ethernet ports
3 or 5 ISDN BRI So ports with integrated lifeline failover relay and terminal power
EIA-232 console port
Proven Patton design, Patton supported
Front panel indicators show system status at-a-glance
SmartNode™ Multi-Port ISDN IAD
ToIP Integrated Access Device

PATTON®

Network Integration



Specifications*

Voice Signaling
SIPv2 • H.323v4 • SIP call transfer, redirect • Overlap or en-bloc dialing • DTMF in-band, out-of-band • Configurable tones

Broadband Access
ADSL2+ ITU-T G.992.5, Annex A, B • Up to 24 Mbps • PPPoE • 8 PVCs, each UBR, CBR or VBR-rt selectable • I.610 OAM F4/F5 support • G.994.1 (G.hs)

Call Routing & Services
Regular expression number matching • Regular expression number manipulation • Least Cost Routing • Number blocking • Short-Dialing • Digit collection • Distribution- and Hunt- Groups

ISDN
3/5 BRI So ports, RJ-45 • NT/TE configurable per port • Built-in line power on each port (total 4W) • DSS1, Q.921, Q.931. NTT-64 • Point-point and point-multipoint • Lifeline Bypass Relay • Optional QSIG support**

Voice Processing
G.711m/A-law • G.723.1 (6.4 kbps) • G.729, 729a, 729ab (8 kbps) • G.726 (16 ,24, 32, 40 kbps) • G.168 echo cancellation (25 ms) • 4/8 simultaneous low-bandwidth voice or T.38 fax calls • Transparent ISDN data • Silence suppression and comfort noise • Adaptive and configurable dejitter buffer • Configurable packet length

IP Quality of Service
Voice priority, DownStreamQoS™ • Traffic Management, shaping policing • IEEE 802.1p, IEEE 802.1Q, 4096 VLANs (Tag insertion/deletion), TOS, DiffServ Labeling

Connectivity
One 10/100Base-T Ethernet port • Auto-MDIX • DHCP Client • PPPoE Client (multi-session) • IP Multi-Netting, VLAN, Secondary IP • IPv4, RIPv2, ICMP • Dynamic and static NAT and NAPT • ACL Firewall • DNS, DynDNS • DHCP Server • SNTP Client • Optional IPsec VPN (DES, 3DES, AES)

Management
Web-based GUI • Fully Documented CLI • Telnet and HTTP access • TFTP configuration up- and download • TFTP firmware upgrade • SNMPv1 agent (MIB II and private MIB) • Built-in diagnostic tools • Secure Auto-Provisioning

Power & Packaging
Desktop metal chassis

Dimensions: 11.0W x 1.5H x 6.2D in. (28W x 3.9H x 15.7D cm)

Weight: < 21 oz (600 g)

Power Consumption < 10 W

Operating Environment
Operating temperature: 32–104°F (0–40°C)

Operating humidity: up to 90%, non-condensin

Compliance
FCC Part 15 Class A (US EMC)

CE per RTTE 99/5/EC (EMC and LVD)

Safety—EN60950

TBR-3 (ISDN BRI/So)

* Specifications subject to change without notice.

** Requires optional license.

Ordering Information

SN4654/3BISG/UI: 3 BRI/So 4-call VoIP Router, Dual 10/100 Ethernet, ADSL2+ interface, Internal 90–250V power

SN4658/5BISG/UI: 5 BRI/So 8-call VoIP Router, Dual 10/100 Ethernet, ADSL2 interface, Internal 90–250V power

Note: Please indicate country specific power cord at time of ordering

Software options (ordered separately)

SNSW-VPN1: License Key for IPSec VPN (DES, 3DES, AES)

SNSW-QSIG1: License Key for QSIG

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